· · · · · · · · · · · · · · · · · · ·	Application No.	Applicant(s)	
	10/603,342	MIKAMI ET AL.	
Notice of Allowability	Examiner	Art Unit	
	Chuc D. Tran	2821	
The MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.31	6 (OR REMAINS) CLOSED in) or other appropriate commi RIGHTS. This application is a	n this application. If not included unication will be mailed in due course. THIS	
1. This communication is responsive to October 23, 2006.			
2. ⊠ The allowed claim(s) is/are <u>1-8 and 10</u> .			
 Acknowledgment is made of a claim for foreign priority u a) ☐ All b) ☐ Some* c) ☐ None of the: 		or (f).	
 Certified copies of the priority documents hav 	•	·	
2. Certified copies of the priority documents hav			
3. Copies of the certified copies of the priority do	ocuments have been receive	d in this national stage application from the	
International Bureau (PCT Rule 17.2(a)).			
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDON'THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		e a reply complying with the requirements	
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which giv			
5. CORRECTED DRAWINGS (as "replacement sheets") mu	st be submitted.		
(a) including changes required by the Notice of Draftsper		v (PTO-948) attached	
1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date	<u>.</u> .		
(b) ☐ including changes required by the attached Examiner Paper No./Mail Date	's Amendment / Comment or	r in the Office action of	
Identifying indicia such as the application number (see 37 CFR each sheet. Replacement sheet(s) should be labeled as such in	1.84(c)) should be written on t the header according to 37 CF	he drawings in the front (not the back) of FR 1.121(d).	
 DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT 	osit of BIOLOGICAL MATE FOR THE DEPOSIT OF BIO	ERIAL must be submitted. Note the DLOGICAL MATERIAL.	
Attachment(s)			
1. Notice of References Cited (PTO-892)		formal Patent Application	
2. Notice of Draftperson's Patent Drawing Review (PTO-948)		ummary (PTO-413), /Mail Date	
 Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 		7. Examiner's Amendment/Comment	
Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. 🛛 Examiner's	Statement of Reasons for Allowance	
	9. 🗌 Other	-	
•			
		THO PHAN	

U.S. Patent and Trademark Office PTOL-37 (Rev. 08-06)

PRIMARY EXAMINES.
Part of Paper No./Mail Date 20061130

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DETAILED ACTION

Allowable Subject Matter

- 1. Claims 1-8 and 10 are allowed.
- 2. The following is an examiner's statement of reasons for allowance:

Prior art Egashira fails to disclose in combination with the remaining limitation: (a) a through hole defined by a vehicle body made of metal, the through hole defining an imaginary planar body having a thickness equal to a thickness of the vehicle body disposed in the through hole and continuous with the vehicle body; (b) a planar antenna having a radiating element and a ground plate, wherein the radiating element is spaced in one direction from one surface of the vehicle body, and the ground plate is spaced in an opposite direction from an opposite surface of the vehicle body such that the imaginary body is interposed between the radiating element and the ground plate in claim 1, (claims 2-6 are allowed since they are dependent on claim 1).

Prior art Egashira fails to disclose in combination with the remaining limitation: (a) a method of boring a hole through a body of the vehicle, the hole defining an imaginary body having a thickness equal to a thickness of the body disposed in the hole and continuous with the body of the vehicle; (b) a method of locating the planar antenna in the through hole so that the imaginary body is positioned between the radiating element and the ground plate.

Prior art Egashira fails to disclose in combination with the remaining limitation: (a) a through hole defined by a metal attachment plate, the through hole defining an imaginary body having a thickness equal to a thickness of the metal attachment plate disposed in the through hole and continuous with the metal attachment plate; (b) a planar antenna having a radiating element and a ground plate, wherein the radiating element is spaced in one direction from one surface of

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the metal attachment plate; (c) the ground plate is spaced in an opposite direction from an opposite surface of the metal attachment plate such that the imaginary body is interposed between the radiating element and the ground plate; (d) the metal attachment plate is integral with a vehicle body.

Prior art Egashira fails to disclose in combination with the remaining limitation: (a) a planar antenna having a radiating element and a ground plate; (b) a metal vehicular body, the vehicular body defining a through hole which has an internal edge and an imaginary body having a thickness equal to a thickness of the metal vehicle body that is disposed within the through hole and is continuous with the vehicular body, wherein the imaginary body is located between the radiating element and the ground plate.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Drawings

3. The drawings were received on June 25, 2006. These drawings are accepted.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuc D. Tran whose telephone number is (571) 272-1829. The examiner can normally be reached on M-F Flex hours.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TC November 30, 2006

THO PHAN
PRIMARY EXAMINER